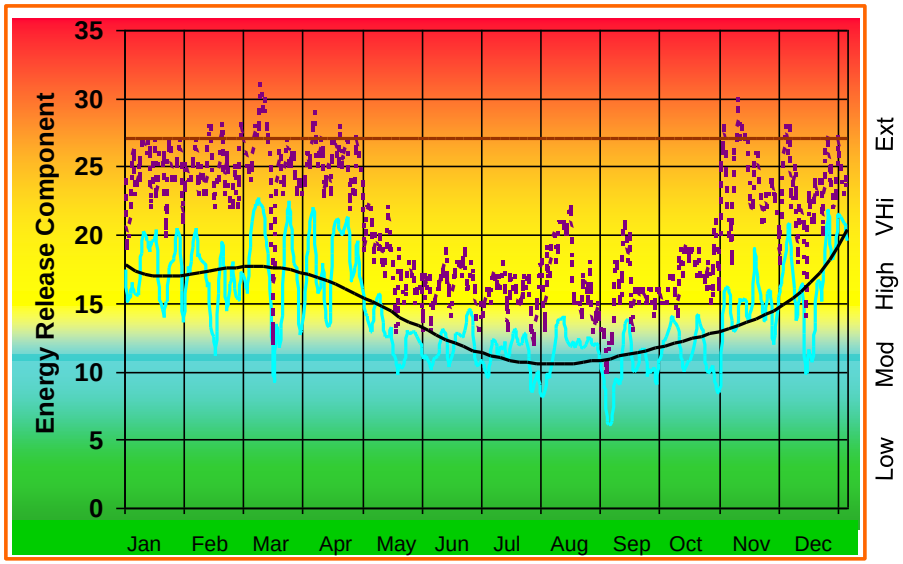
FIRE DANGER – (Name) District

Maximum, **Average**, **97 th Percentile**



revised	ENERGY COMPONENT		
7/28/2005			
	Average Seasonal Values	Average Max Values	Max Value Observed
January	17.2	26.2	27
February	16.7	26.8	28
March	17.4	28.3	31
April	18.4	27.3	29
May	12.7	19.3	22
June	11.9	17.5	19
July	11	16.2	18
August	11.7	16.8	22
September	10.7	17	21
October	11.9	20.2	28
November	15.1	26.6	30
December	16.9	26.2	28

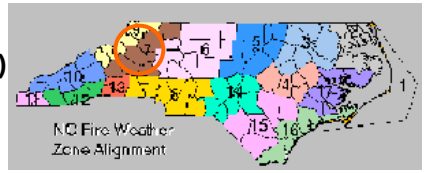
Fuel Model E_ Leaf Litter

Fire Danger Area:

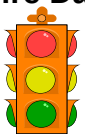
NC (Topo Region / (Specify Topo Area)

NWS Forecasting Office – (3 letter ID)

(Lenoir Fire Danger RAWS)



Fire Danger Interpretation: this card is based on 5 Yrs. of data.



EXTREME -- Use extreme caution
(Caution) -- Watch for change
Moderate -- Lower potential, but always be aware

Maximum -- highest ERC by day for 2000 - 05
Average -- Shows mean daily value thru the year
97 th Percentile -- Only 3 % of the days from 2000 - 05 had an ERC above 27.
81 Percentile – represents an ERC level (**21 +**) where fire intensities can require air support and indirect attack .

Local Thresholds-- *Watch out* : Combinations of any of these 3 factors can greatly increase fire behavior.

Windspeed over 12 mi/h, **RH** less than 25%, **Temperature** over 75

Remember what Fire Danger tells you:

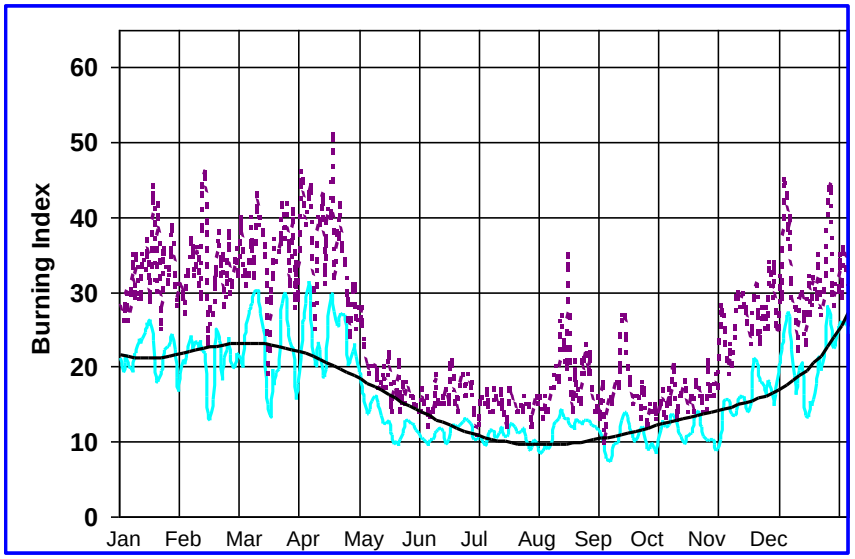
- ERC gives general seasonal trends calculated from precip, temp, and RH.
- Wind speed is not part of the ERC calculation.
- Watch local conditions and variations across the landscape--Fuel, Weather, Topography
- Listen to weather forecasts--especially WIND.

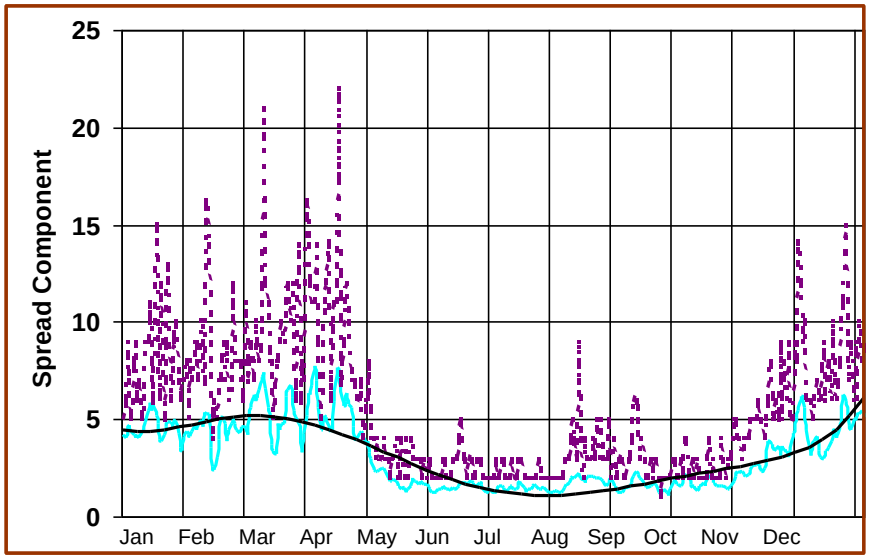
Energy Release Component is a number relating to the available energy released from forest fuels (BTU / ft²) at the head of a fire's flaming front. ERC is a composite of all live & dead fuel moistures. It is a very good reflection of drought conditions. It is a "build up" type index. Given a fire start in a fuel with a high ERC, fire containment can be expected to be difficult. ERC is very valuable in assessing the depth of a burn, consumption of the various fuel sizes, residual burning , and mop-up requirements.

Past Experience:

To be filled in with local information on the specific fires mentioned.

Modified by NCDFR from developed pocket card by NWCG NAGFDR > FDWT > FEWT





Burning Index (BI) - relates to the contribution of the fire's behavior in containing the fire. The difficulty of containment is directly proportional to the fireline intensity. BI is derived from the SC + the ERC. BI is a cross reference of fireline intensity & flame length. It accesses spotting & crown fire potential as well as suppression resource needs & tactical considerations. In (hardwood fuels**, BI's of ?+,** are exceptional intense fires with much spotting**.** The doubling of the BI, 20 to 40 can increase flame length from 2 to 4 ft. yet, this is a 5 fold increase in fireline intensity.

Ignition Component (IC) – the probability a firebrand will cause an "actionable" fire, & requires suppression. IC is more than just a probability of a fire start. It has to have the potential to spread. IC can be aid in assessing spotting potential. An **IC value of ≥ 30 + is a critical threshold value**. Values at this level are critical during March, April & May as firebrands can initiate spot fires very easily.

Spread Component (SC) – the rate of spread (ROS) expressed in feet per minute. It is a guide to the fastest spread of a fire, its head fire. Wind speed, slope & fuels are key inputs. SC aids in assessing readiness plans, air tanker use, ground tactics, & pre-positioning suppression resources. The SC value "usually exceeds" the fire's true ROS. In (hardwood litter **SC values exceeding ? + are critical.** At this value the fire is moving faster than fire lines can be built.